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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/617,978

07/11/2003

Rafael Herrmann

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4095

29122

7590

05/26/2005

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EXAMINER

KUBELIK, ANNE R

ART UNIT

PAPER NUMBER

1638

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/617,978

Applicant(s)

HERRMANN ET AL.

Examiner

Anne R. Kubelik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected:
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-37 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-7 and 11-31, drawn to a nucleic acid, expression cassettes, host cells, viruses, vectors, plants and seeds comprising it, and a method of using it to alter plant pest resistance, classified in class 800, subclass 302.
 - II. Claims 8-10, drawn to a protein and compositions comprising it, classified in class 530, subclass 300.
 - III. Claims 32-33, drawn to a method of identifying a protein that possesses oral pesticidal activity, classified in class 800, subclass 279.
 - IV. Claims 34-36, drawn to a method for screening arthropod venom proteins for oral pesticidal activity, classified in class 514, subclass 2.
 - V. Claim 37, drawn to an antibody, classified in class 530, subclass 387.1.

2. The inventions are distinct, each from the other because of the following reasons:

The DNA of invention I is independent and distinct from the protein of invention II because DNA and protein differ in composition, structure and function. Furthermore, inventions I and II are not co-extensive; a search of the protein will not find nucleic acids comprising 30 contiguous nucleotides of the sequences listed in claim 1(e). Lastly, the protein of the second invention could be made by a process other than the expression of the gene of the first invention, such as chemical synthesis or purification from the natural source, and the DNA of the first invention may be used for processes other than the production of protein, such as a nucleic acid hybridization assay.

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The methods of inventions III and IV are independent and distinct from the protein of invention II. The methods use proteins other than that in invention II as starting material, and the methods do not require the protein in any manner.

The methods of inventions III and IV are independent and distinct from the nucleic acid of invention I. The methods make nucleic acids other than that in invention II, and the methods do not require the DNA in any manner.

The DNA of invention I is independent and distinct from the protein of invention V because DNA and protein differ in composition, structure and function. Furthermore, the protein of the second invention cannot be made by the expression of the gene of the first invention. Thus, each invention requires an independent search.

The protein of invention II is independent and distinct from the protein of invention V. While both inventions II and V are drawn to proteins, the protein of invention II is a single chain molecule that functions as a pesticide, while the antibody of invention V encompasses antibodies that comprise multiple chains. Thus, the protein of invention II and the antibody of invention V are structurally distinct molecules. Furthermore, searching inventions II and V would impose a serious search burden on the Office. The inventions have a separate status in the art, as shown by their different classifications, and the two require separate searches. The amino acid sequence search of the full-length protein that is required for a determination of novelty and nonobviousness of the protein is not required to identify the antibodies of invention V as an antibody that binds to an epitope of the protein of invention II may be known even if the protein of invention II is novel.

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3. Nucleotide sequences encoding different proteins are structurally distinct chemical compounds that are unrelated to one another, as are different proteins are structurally distinct chemical compounds that are unrelated to one another. These sequences are thus deemed to normally constitute **independent and distinct** inventions within the meaning of 35 U.S.C. 121. Each sequence requires an independent search of the sequence databases. Absent evidence to the contrary, each such nucleotide and amino acid sequence is presumed to represent an independent and distinct invention, subject to a restriction requirement pursuant to 35 U.S.C. 121 and 37 CFR 1.141 et seq (see MPEP 803.04 and 2434).

If Applicant elects invention I, II or V, Applicant is additionally required to select a single nucleotide sequence or amino acid sequence for said Group, as appropriate. This requirement is not to be construed as a requirement for an election of species, since each nucleotide and amino acid sequence is not a member of single genus of invention, but constitutes an independent and patentably distinct invention.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, fields of search, and classification, restriction for examination purposes as indicated is proper.

Applicant is advised that for the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

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application. Any amendment of inventorship must be accompanied by a petition under 37

CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne R. Kubelik, whose telephone number is (571) 272-0801. The examiner can normally be reached Monday through Friday, 8:30 am - 5:00 pm.

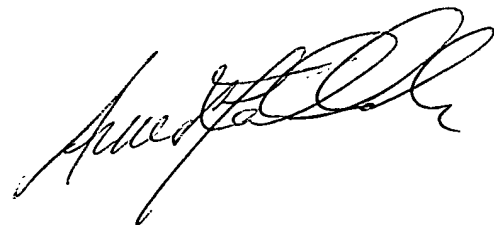
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached at (571) 272-0804. The central fax number for official correspondence is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Anne R. Kubelik, Ph.D.
May 13, 2005



ANNE KUBELIK, PH.D.
PRIMARY EXAMINER